

The Condition of College & Career Readiness

This report looks at the achievement of the ACT®-tested 2017 graduating class relative to college and career readiness. A total of 60% of students in the 2017 US graduating class took the ACT® test, compared to 64% last year, 54% in 2013, and 42% in 2007. The growing percentage of the nation's graduates taking the ACT over the past decade has enhanced the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness.

As a research-based nonprofit organization, ACT is committed to providing information and solutions to support the following:

- **Holistic view of readiness.** The ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of multiple domains critical in determining an individual's readiness for success in college and career. Social and emotional learning skills (SEL) are also vital. Behavioral skills, cross-cutting capabilities, and navigational skills should be measured and addressed. Together, these elements provide a comprehensive picture of student readiness for success after high school.
- **Meaningful data for better decisions.** ACT is focused on providing better data to students, parents, schools, districts, and states so that all can make more informed decisions to improve educational outcomes. We accomplish this goal by taking a holistic view and using consistent and reliable historical information so that individuals and institutions have a better context to make critical decisions about the journey they have undertaken.

The Condition of College & Career Readiness 2017

Tennessee Key Findings

Performance

- In the Tennessee graduating class of 2017, 75,808 graduates took the ACT® test, compared to 69,641 in 2013.
- Tennessee graduates of 2017 had an average Composite score of 19.8, compared to the national average of 21.0.
 - ~ It is important to note that this year's decline of 0.1 average ACT Composite score can be attributed to several factors. Because of the increase in ACT state accountability and now as a graduation requirement, there are more students testing from a wide background of students and who were not planning on pursuing postsecondary education.
- In 2017, 19 percent of Tennessee graduates met all four ACT College Readiness Benchmarks. This compares to 20 and 18 percent of 2016 and 2013 graduates, respectively.
 - ~ In 2017, 39 percent of Tennessee graduates met zero ACT College Readiness Benchmarks. This compares to 39 and 39 percent of 2016 and 2013 graduates, respectively.
- The percentage of students meeting the ACT College Readiness Benchmarks for each subject are: English—56 percent; Reading—39 percent; Math—29 percent; and Science—29 percent.

STEM

- In 2017, 34,768 Tennessee graduates (46 percent) indicated having an interest in STEM majors and/or careers.
- Compared to a 2017 Tennessee graduating class STEM average of 19.8, graduates in 2016 and 2013 had STEM averages of 19.8 and 19.5, respectively.
- For years 2013 and 2017, Tennessee graduates meeting the ACT STEM College Readiness Benchmark had average science scores of 28.0 and 28.7, respectively.
- For years 2013 and 2017, Tennessee graduates meeting the ACT STEM College Readiness Benchmark had average math scores of 28.2 and 28.1, respectively.

Career Readiness

- In 2017, 14,706 Tennessee graduates (19 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher, based upon ACT Composite score, compared to 538,392 (27 percent) nationally.
 - ~ 37,327 Tennessee graduates (49%) were likely to attain the Silver ACT WorkKeys NCRC® or higher.
 - ~ The ACT Composite scores associated with a 50% chance of earning each ACT WorkKeys NCRC level or higher are: 13 for Bronze, 17 for Silver, 25 for Gold, and 35 for Platinum. Based on those cut scores, students who earned an ACT Composite score of less than 13 would be classified as "Needs Improvement," 13 to 16 as "Bronze," 17 to 24 as "Silver," and 25 or above as "Gold or Higher." For comparison, individual student score reports classify those who scored 12 to 13, 14 to 17, and 18 and higher as making progress toward Bronze, Silver, and Gold certificates.
- Earning a Gold certificate translates to having the skills for 93% of jobs from the ACT JobPro® database, which contains more than 21,000 profiled jobs. Earning a Silver certificate translates to having the skills for 67% of jobs from the ACT JobPro database.

Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Tennessee high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2017 graduating class would result in:
 - ~ 159 more students enrolling in college.
 - ~ 190 more students persisting to year two.
 - ~ 156 fewer students needing remedial English.
 - ~ 307 fewer students needing remedial math.
 - ~ 214 more students persisting to year four.
 - ~ 230 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Tennessee, 2017 graduates taking the ACT two or more times had an average Composite score of 21.5, compared to 17.4 for single-time testers.
 - ~ In comparison to students nationwide, a lower percentage of Tennessee students tend to wait until their senior year to take the ACT.
- For Tennessee's 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Tennessee-Knoxville, Middle Tennessee State University, University of Tennessee-Chattanooga, University of Memphis, and Tennessee Technological University.
 - ~ For Tennessee's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were Western Kentucky University, Mississippi State University, and University of Alabama.
- ACT issued 24,260 ACT fee waivers to qualified Tennessee students. However, 7,540 students (31 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 issued nationally, of which 181,092 (28 percent) did not take advantage. Fee waivers represent a great opportunity for students with socio-economic challenges to retest without incurring any fees. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.
- Compared to 73 percent of 2017 graduates nationally, 74 percent of Tennessee graduates opted into EOS.
 - ~ The ACT "Get Your Name in the Game" initiative allows colleges and universities access to underserved students' names free of charge.

Pipeline

- In the Tennessee graduating class of 2017, 16,163 (21 percent) had parents who did not attend college.
- In the Tennessee graduating class of 2017, 13,390 (18 percent) aspired to attain a professional degree. They had an average Composite score of 22.8.
- In the Tennessee graduating class of 2017, 7,674 (10 percent) aspired to attain a graduate degree. They had an average Composite score of 23.7.
- In the Tennessee graduating class of 2017, 30,749 (41 percent) aspired to attain a bachelor's degree. They had an average Composite score of 19.9.
- In the Tennessee graduating class of 2017, 5,028 (7 percent) aspired to attain an associate's degree. They had an average Composite score of 16.6.

- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Tennessee graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Mechanical Engineering.
 - ~ In the Tennessee graduating class of 2017, 9,078 (12 percent) indicated being undecided about their college major. They had an average Composite score of 20.8.
 - ~ In the Tennessee graduating class of 2017, 2,664 (4 percent) indicated planning on majoring in education. They had an average Composite score of 20.1.

ACT Footprint

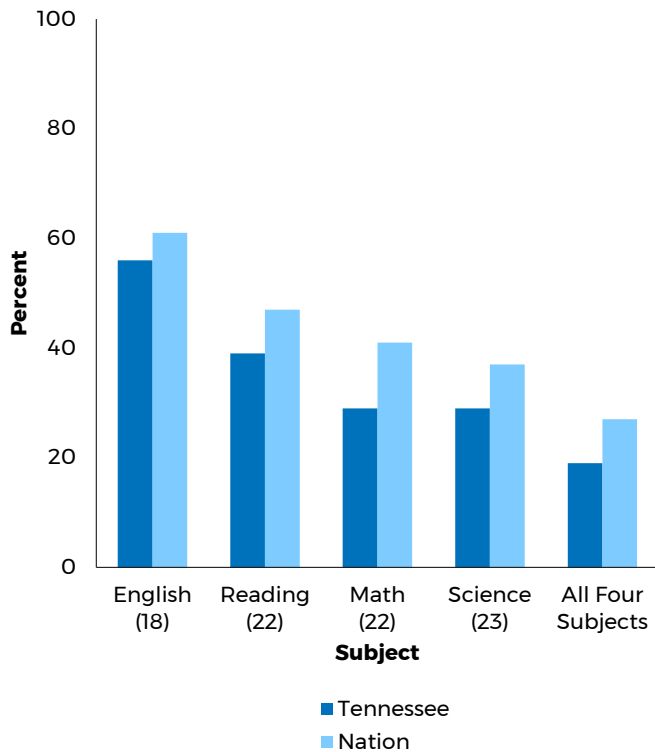
- Number of administrations:
 - ~ ACT Aspire® Summative: 39,003
 - ~ ACT Aspire Periodic: 22,816
 - ~ ACT Engage®: 553
 - ~ PreACT®: 10,502
 - ~ ACT WorkKeys: 16,961

Additional Points

- ACT provides an additional score indicator of "understanding complex texts" on the ACT score report. This indicator measures the level of proficiency on a subset of items from the ACT reading test, assessing the ability to make global bridging inferences across a range of increasing complex texts.
 - ~ Close to 60 percent of 2017 Tennessee graduates scored "Below Proficient" in understanding complex texts.
- There were 40 percent of the graduating class of 2017 in Tennessee that met the ACT Composite score goal of 21 set by the Tennessee Department of Education.
 - ~ Because of the ACT senior retake project, students will have more opportunities to meet the strategic goal of obtaining an ACT Composite score of 21 and qualifying for the HOPE Scholarship.

Tennessee College and Career Readiness Attainment, Participation, and Opportunity

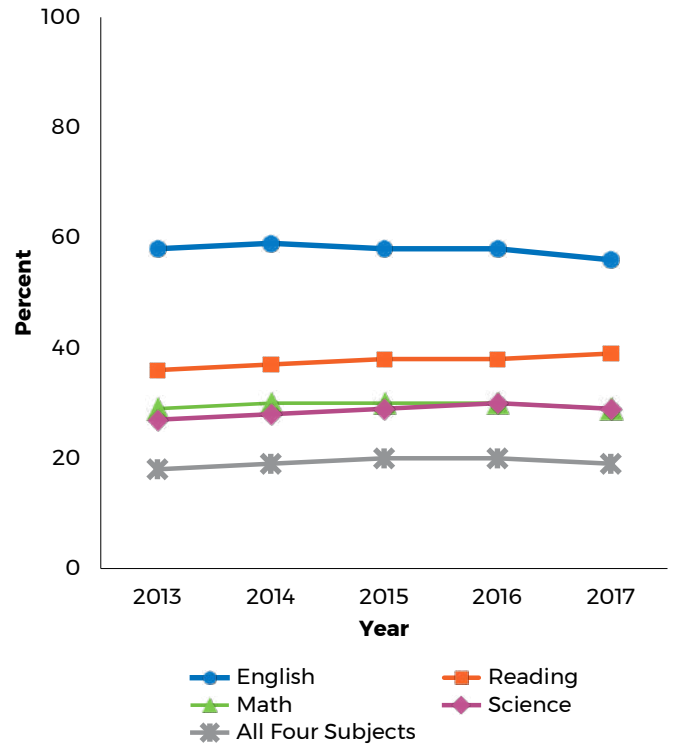
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Tennessee	56	39	29	29	19
Nation	61	47	41	37	27

Percent of 2013–2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks

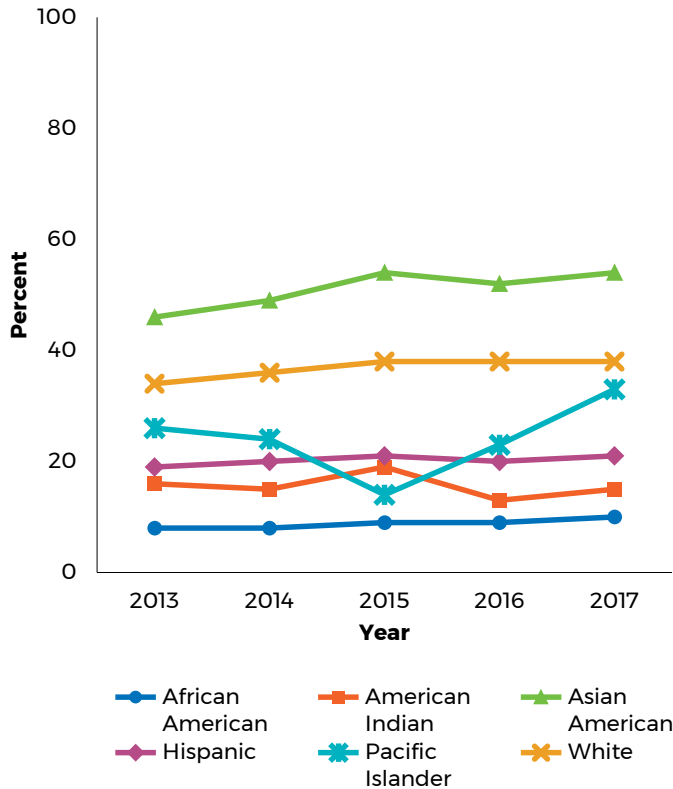


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	58	59	58	58	56
Reading	36	37	38	38	39
Math	29	30	30	30	29
Science	27	28	29	30	29
All Four Subjects	18	19	20	20	19

* The ACT College Readiness Benchmarks are scores on the ACT subject area tests that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. Throughout this report, benchmark attainment corresponds with students meeting or exceeding score values in parentheses ().

Percent of 2013-2017 ACT-Tested High School Graduates Meeting Three or More ACT College Readiness Benchmarks by Race/Ethnicity*



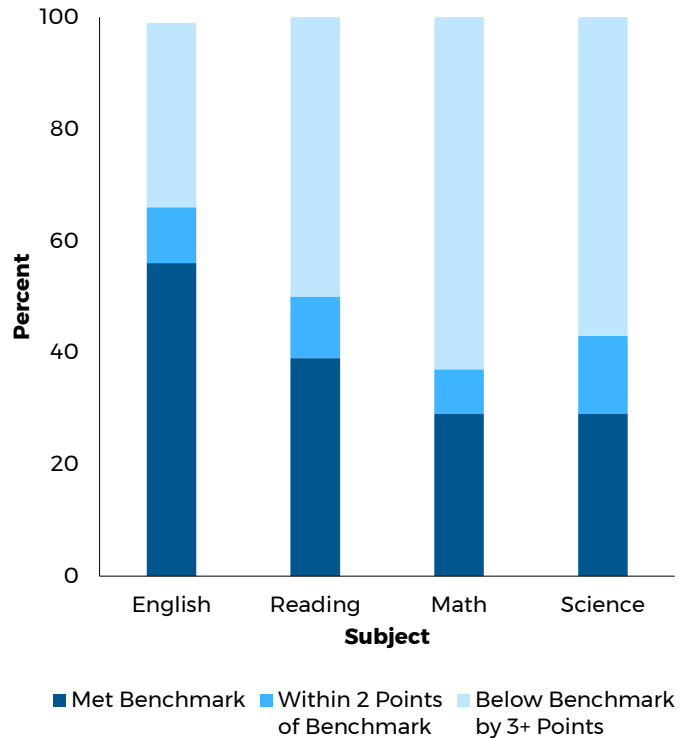
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	8	8	9	9	10
American Indian	16	15	19	13	15
Asian American	46	49	54	52	54
Hispanic	19	20	21	20	21
Pacific Islander	26	24	14	23	33
White	34	36	38	38	38

* Percentages for groups with insufficient counts will be missing.

Percent of 2017 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

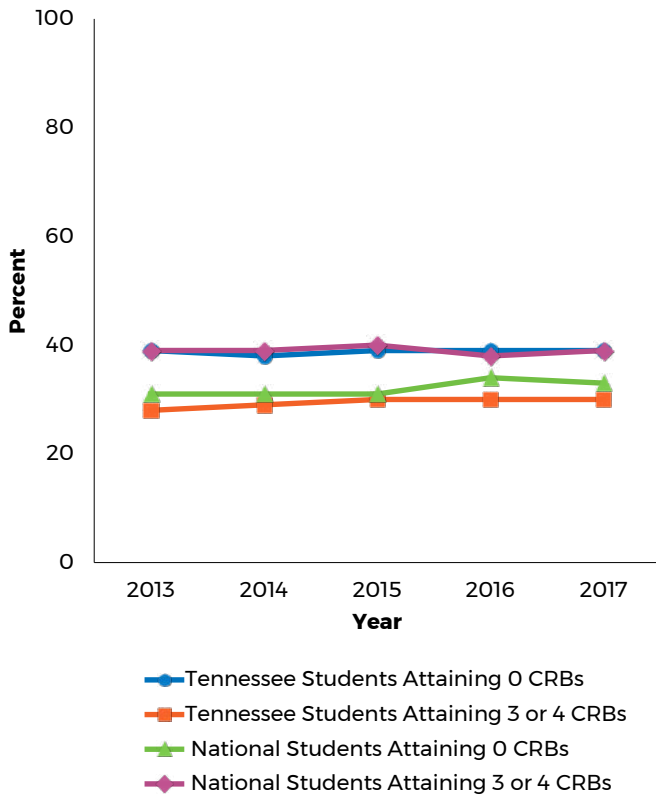
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	56	39	29	29
Within 2 Points of Benchmark	10	11	8	14
Below Benchmark by 3+ Points	33	50	63	57

Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained

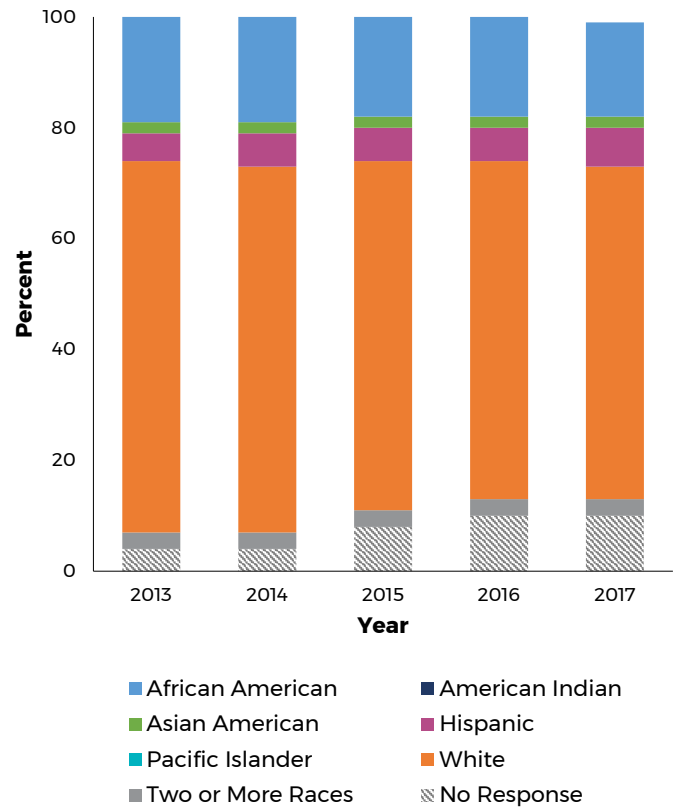


Data from graph above:

Attainment	2013	2014	2015	2016	2017
Tennessee Students Attaining 0 CRBs	39	38	39	39	39
Tennessee Students Attaining 3 or 4 CRBs	28	29	30	30	30
National Students Attaining 0 CRBs	31	31	31	34	33
National Students Attaining 3 or 4 CRBs	39	39	40	38	39

Percent of 2013–2017 ACT-Tested High School Graduates by Race/Ethnicity

Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Race	2013	2014	2015	2016	2017
African American	19	19	18	18	17
American Indian	0	0	0	0	0
Asian American	2	2	2	2	2
Hispanic	5	6	6	6	7
Pacific Islander	0	0	0	0	0
White	67	66	63	61	60
Two or More Races	3	3	3	3	3
No Response	4	4	8	10	10

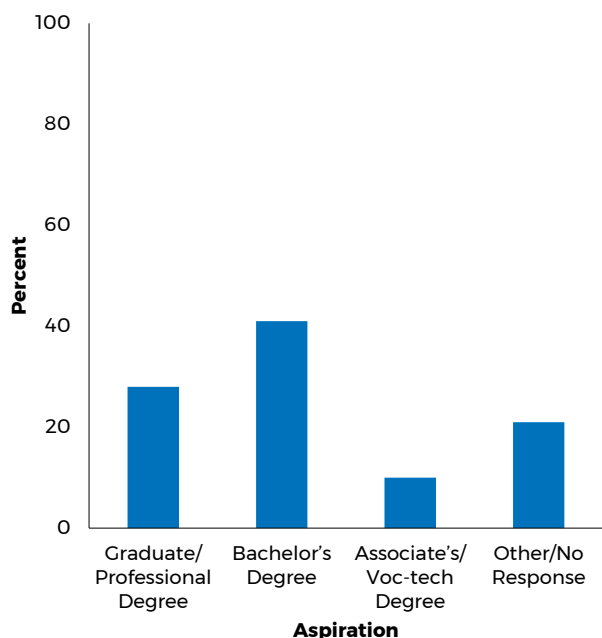
Tennessee: Between 2013 and 2017, the number of students taking the ACT in Tennessee increased by 6,167 students (9 percent).

Student Data Trends: 2013-2017, State vs. Nation

Outcome	Cohort	2013	2014	2015	2016	2017
Percent Tested	Tennessee	100	100	100	100	100
	Nation	54	57	59	64	60
N Tested	Tennessee	69,641	69,505	68,737	71,880	75,808
	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average English Score	Tennessee	19.3	19.6	19.5	19.6	19.5
	Nation	20.2	20.3	20.4	20.1	20.3
Average Reading Score	Tennessee	19.8	20.1	20.1	20.3	20.1
	Nation	21.1	21.3	21.4	21.3	21.4
Average Math Score	Tennessee	19.1	19.2	19.3	19.2	19.2
	Nation	20.9	20.9	20.8	20.6	20.7
Average Science Score	Tennessee	19.4	19.6	19.9	19.9	19.9
	Nation	20.7	20.8	20.9	20.8	21.0
Average Composite Score	Tennessee	19.5	19.8	19.8	19.9	19.8
	Nation	20.9	21.0	21.0	20.8	21.0

Percent of 2017 ACT-Tested High School Graduates by Educational Aspirations

Note: Percents in this graph may not sum to 100% due to rounding.



There is good news in that 79% of Tennessee's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 80% of Tennessee's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 57% who actually did enroll. If we fully closed the aspirational gap, an additional 15,902 of the 2016 ACT-tested graduates from Tennessee would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	28
Bachelor's Degree	41
Associate's / Voc-tech Degree	10
Other / No Response	21



Tennessee State Exemplar 2017 ACT College and Career Readiness Campaign

Japheth Hayman

Central High School, Shelby County Schools

“While it isn’t a primary goal, I may just be the first man to conduct an ensemble in space.”

Japheth sings in three different choirs and is president of his school’s debate team, in addition to taking several Advanced Placement courses to make sure that he is prepared for the rigors of college-level classes.

Japheth wants to be an engineer and plans to attend an engineering school to earn his bachelor’s degree, but will not forget his love of choral music when he eventually goes to work for NASA or SpaceX.

Information and products for further review

	Knowledge & Skills	Social & Emotional
Assessments	ACT Aspire®	ACT Tessera™
	PreACT®	ACT Engage®
	The ACT® Test	
	ACT WorkKeys®	
Research	Condition of College & Career Readiness	A Rosetta Stone for Noncognitive Skills
	ACT® National Curriculum Survey®	
	The Forgotten Middle	Tessera Comprehensive Theory of Action
	Rigor at Risk	
	ACT Holistic Framework™	
Resources	PLDs Learning Description Review	Tessera Teacher Playbook
	Curriculum Review Worksheets	
	OpenEd Learning Resources	
	Test Prep	
Training	Professional Learning Sessions	
	College & Career Readiness Workshops	
	Holistic Framework Webinars	

We are more than just the ACT test. ACT products and services encompass a variety of research- and assessment-based solutions.

As research leaders, we continue to innovate education and workforce solutions to help guide individuals to education and career success.

Find out more at www.act.org.

Key ACT Research

As students navigate their education and career journeys, it is critical for them to be ready for college and career success. College and career readiness is supported by the ACT Holistic Framework, a research-based, multidimensional model for understanding the essential knowledge and skills needed for success, and the solutions that can meet students' navigation needs. Visit act.org/condition2017 to access key reports listed below.

- Serving students' navigation needs from kindergarten to career requires a holistic approach:
 - ~ *Beyond Academics: A Holistic Framework for Enhancing Education and Workplace Success*
 - ~ *The Importance of Behavioral Skills and Navigation Factors for Education and Workforce Success*
- The ACT Holistic Framework is supported by prolific research:
 - ~ Core Academic Skills:
 - 2017 State and National Condition Reports
 - *Profiles of STEM Students: Persisters, Joiners, Changers, and Departers*
 - *ACT Composite Score by Parental Education Level, 2012-2016*
 - *Comparisons of Student Achievement Levels by District Performance and Poverty*
 - ~ Behavioral Skills (also called Social and Emotional Learning):
 - *The Development of Behavioral Performance Level Descriptors*
 - ~ Cross-Cutting Capabilities:
 - *ACT National Curriculum Survey 2016*
 - ~ Student journeys continue into postsecondary education and careers:
 - *Higher Education Research Digest*
 - *Predicted Attainment of ACT National Career Readiness Certificates for the 2016 ACT-tested High School Cohort*

Recommendations

- 1. Use a holistic assessment model for school accountability that measures student readiness for college and career across multiple domains.** While it is essential to measure students' academic achievement in assessing college and career readiness, it is not enough. Social and emotional learning skills are important and measurable, and they can be impacted. Assessment models should take into account core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation skills to provide an integrated picture of college and work readiness.
- 2. Make special efforts to ensure that underrepresented students have equal access and opportunity to pursue postsecondary education.** According to ACT research, most underrepresented students want to continue their education after high school, but they face many barriers. Ensuring they have access to the same rigorous core curriculum as others is just one step. Many also lack the resources, information, and familial and peer support they need to prepare for success after high school. Special efforts must be made to level the playing field for underrepresented students so they have equal opportunity to succeed.
- 3. Increase emphasis on STEM readiness initiatives, measures, and programs.** With technology advancing rapidly, the importance of STEM readiness is only increasing. The threat of robotic and computer-assisted technologies eliminating jobs is growing while the remaining and emerging jobs will likely require higher-level skills. ACT data continue to show that many graduates are not ready. Without improvement in STEM readiness, far too many will be ill-prepared for the future workforce.
- 4. Focus on fewer, higher, and clearer learning standards in K-12 schools.** Far too many students continue to graduate from high school without all of the core skills they will need to ably succeed at the next level. Many will struggle, and many will likely fail to realize their aspirations. The push toward raising the bar on learning standards and focusing on the essential skills necessary for success must continue.
- 5. Begin assessing learning and implementing intervention strategies early.** Early assessment and intervention are critical to improving educational outcomes. If students are not on track for college and career readiness by the time they reach middle school, it may be too late. Assessing learning and implementing intervention strategies to help students get on the right path for college and career readiness must begin in elementary school.